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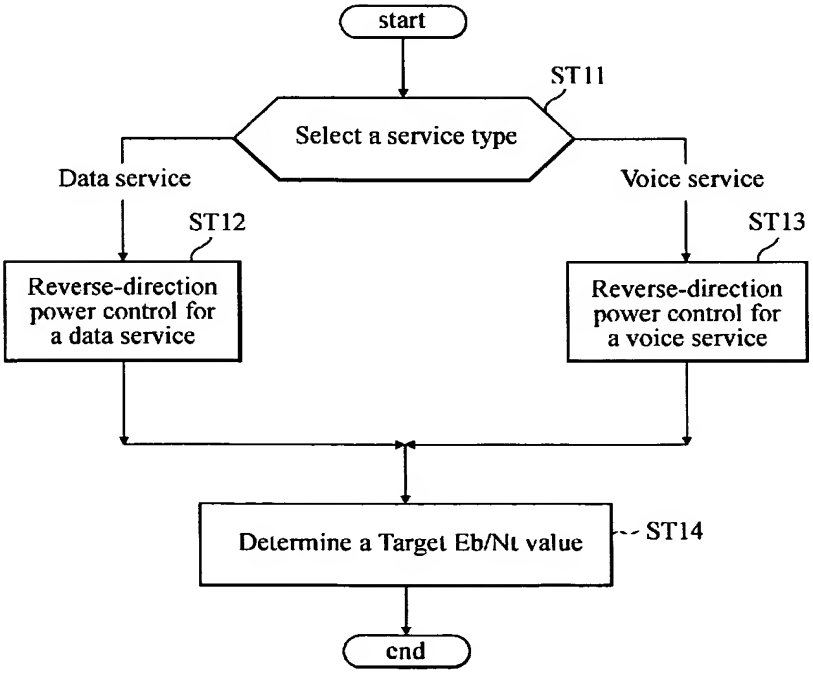
(54) Title: METHOD OF CONTROLLING POWER IN A CDMA-2000 SYSTEM



(57) Abstract: The present invention is directed to a method of controlling power in a CDMA-2000 system. In a conventional CDMA-2000 system, a reverse-link power control algorithm has been employed, which is optimized only for voice communication. The purpose of the reverse-link power control for voice communication is to maintain the error rate of the frame received in the reverse channel below a certain rate (typically, an error rate of 1%). As such, the reverse-link power control algorithm for voice communication is not suitable for a data service, the throughput of which needs to be maximized. Based on the above observation, the present invention suggests a method of implementing different algorithms according to the service type to be provided through a CDMA-2000 system. That is, if the service type is a voice service, the conventional reverse-link power control algorithm that is used for an IS-95A or IS-95B CDMA system is employed at a Base Station Subsystem (BTS). However, if the service type is a data service, a target Energy per Bit / Noise Total (Eb/Nt) value for each of a reverse fundamental channel and a reverse supplemental channel is determined based on the statuses of the frames received in the reverse channels. With the suggested method, the present invention can optimize the power control algorithm for both the voice service and the data service. Thus, the throughput in the data service can be enhanced.

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